

Table S2. List of 40 differentially expressed microRNAs (Q-value < 0.05) in acute cellular rejection with their experimentally validated targets.

microRNA	Target Gene
1. hsa-miR-10b-5p	BCL2L11
	CDK2
	CDKN1A
	CDKN2A
	CSNK2A1
	HOXD10
	KLF4
	LAMC1
	MAPRE1
	NCOR2
	NF1
	NOTCH1
	NR4A3
	NRP2
	PAX6
	PIEZO1
	PPARA
	SDC1
	SRSF1
	TFAP2C
TP53	
TRA2B	
2. hsa-miR-124-3p	ADIPOR2
	AHR
	AR
	BACE1
	CCL2
	CDK2
	CDK4
	CDK6
	CDKN2A
	CEBPA
	COL1A1
	CTDSP1
	E2F6
	EFNB1
	ELK3
	EYA4
	EZH2

FXN
HCN2
HMGA1
IL6
IL6R
IQGAP1
IRAK3
ITGB1
KLF4
LAMC1
MAP2K3
MECP2
MSN
MTPN
NFKBIZ
NR3C1
NR4A3
PEA15
PNP
PPARA
PRPS1
QKI
RASSF2
RDH10
RELA
ROCK2
SHC1
SIRT1
SLC16A1
SMYD3
SNAI2
SP1
SULF1
VIM
VKORC1

3.	hsa-miR-1258	HPSE
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4.	hsa-miR-128-3p	BMI1 CTDSP1 DCX E2F3 EGFR EYA4 FBXW7
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KLF4
MAP2K1
NTRK3
POU5F1
RELN
RPS6KA5
SIRT1
SLC16A1
SOX2
TGFB1

5. hsa-miR-133a-3p

BCL2L1
CACNA1C
CASP9
COL1A1
EGFL7
EGFR
FSCN1
GSTP1
HCN2
HCN4
KCNH2
KCNQ1
KRT7
LASP1
MCL1
MSN
PIK3R2
PKM
PNP
PRDM16
RGS3
SP1
TAGLN2
VEGFA
VKORC1

6. hsa-miR-147a

ACVR1C
VEGFA

7. hsa-miR-148a-3p

ACVR1
BCL2
CCKBR
CDC25B
DNMT1
DNMT3B

		HLA-G
		IRS1
		NR1I2
		RPS6KA5
		TGIF2
		TMED7
8.	hsa-miR-148b-3p	CCKBR
		CSF1
		EYA4
		HLA-G
		ITGA5
		MECP2
		NR3C2
		NRAS
		PIK3CA
		ROCK1
		SNAI2
9.	hsa-miR-149-3p	AKT1
		E2F1
		MYBL2
		TGIF2
10.	hsa-miR-155-3p	IRAK3
11.	hsa-miR-181a-3p	NANOG
12.	hsa-miR-198	CCNT1
		MYB
		NTRK3
13.	hsa-miR-202-3p	MYCN
14.	hsa-miR-214-3p	ASF1B
		ATF4
		BCL2L2
		CTNNB1
		MAP2K3
		MAPK8
		PLXNB1
		POU4F2
		PSMD10
		PTEN
		QKI
		SRGAP1
		SRGAP2
		TP53
		TWIST1

		XBP1
15.	hsa-miR-216a-5p	CD44 CDC42 PTEN SIRT1 SMAD7 CSNK2A1
16.	hsa-miR-216b-5p	CSNK2A1
17.	hsa-miR-224-5p	AP2M1 API5 CDC42 CXCR4 EDNRA EYA4 FOSB KLK10 NCOA6 NIT1 PEBP1 SMAD4
18.	hsa-miR-296-3p	CDC25B CDKN2A HMGA1 KCNH1 LGALS3BP PIK3R2 PKM SPI1
19.	hsa-miR-298	BACE1 CDKN1A
20.	hsa-miR-302a-3p	AKT1 CCND1 CDKN1A DAZAP2 LEFTY1 LEFTY2 NR2F2 SLAIN1 TAC1 TOB2
21.	hsa-miR-30c-1-3p	HMBOX1
22.	hsa-miR-326	CD9

GLI1
MSH3
NOTCH1
NOTCH2
PKM
SMO
VKORC1

23. hsa-miR-34a-5p

ACSL1
ACSL4
AP2M1
AXIN2
AXL
BCL2
BMP7
CCL22
CCND1
CCND3
CCNE2
CD44
CDC25A
CDK4
CDK6
CDKN2A
CDKN2C
CEBPB
CTNNB1
DLL1
E2F1
E2F3
EFNB1
EPHA5
FOSL1
FOXP1
GRM7
HDAC1
HNF4A
IFNB1
IMPA1
IMPDH2
JAG1
KLB
LDHA
LEF1

MAGEA12
MAGEA2
MAGEA3
MAGEA6
MAP2K1
MAP3K9
MCM5
MET
MTA2
MYB
MYC
MYCN
NANOG
NOTCH1
NOTCH2
PDGFRA
PEA15
PPP1R10
SEPT7
SIRT1
SOX2
SPI1
STX1A
SYT1
TP53
ULBP2
VAMP2
VEGFA
WNT1
YY1
ZAP70

24. hsa-miR-34b-5p

BCL2
CCNE2
CDK4
CREB1
HNF4A
MET
MYB
MYC

25. hsa-miR-365a-3p

BCL2
CCND1
IL6
IMPA1

		MTA2
26.	hsa-miR-376a-5p	ACVR1C PRPS1 SLC16A1 SNX19 SRSF11 TTK ZNF513
27.	hsa-miR-429	BAP1 BCL2 ELMO2 ERBB2IP HOXB5 KLF11 KLHL20 MYC OSTF1 PTPRD RASSF2 RERE RIN2 SEPT7 SHC1 SOX2 TCF7L1 VAC14 WASF3 WDR37 XIAP ZEB1 ZEB2 ZFPM2
28.	hsa-miR-490-3p	ERGIC3
29.	hsa-miR-504-5p	DRD1 MDM2 TCEAL1 TP53 VEGFA
30.	hsa-miR-506-3p	FXN
31.	hsa-miR-515-3p	CDKN1A
32.	hsa-miR-516a-3p	SULF1
33.	hsa-miR-520h	ABCG2

VEGFA

34.	hsa-miR-596	LGALS3BP
35.	hsa-miR-615-5p	IGF2
36.	hsa-miR-622	KRAS
37.	hsa-miR-642a-5p	DOHH
38.	hsa-miR-659-3p	GRN
39.	hsa-miR-765	HNF4A
		NTRK3
40.	hsa-miR-885-5p	CDK2
		MCM5